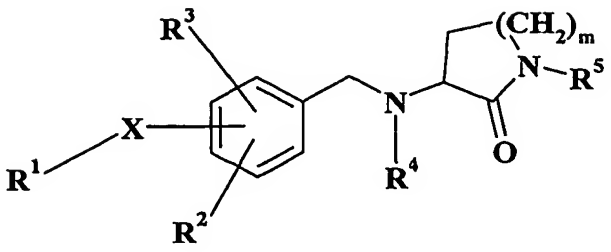
CLAIMS

1. The use of a compound of general formula **I**



I

wherein

m is an integer from 1 to 3

X is methylene, oxygen, sulphur or a NR^6 group;

$\mathbf{R^1}$ is a straight or branched C_1-C_8 alkyl or C_3-C_8 alkenylene or C_3-C_8 alkynylene chain, optionally substituted with CF_3, phenyl, phenoxy or naphthyl or phenyl, the aromatic rings optionally substituted by one or more C_1-C_4 alkyl, halogens, trifluoromethyl, hydroxy or C_1-C_4 alkoxy groups;

$\mathbf{R^2}$, $\mathbf{R^3}$ are independently hydrogen, a C_1-C_3 alkyl chain, halogen, trifluoromethyl, hydroxy or C_1-C_4 alkoxy groups;

$\mathbf{R^4}$, $\mathbf{R^5}$, $\mathbf{R^6}$ are independently hydrogen or C_1-C_6 alkyl;

and the pharmaceutically acceptable salts thereof for the preparation of a medicament for the treatment of pain, migraine, cognitive disorders, inflammation, gastrointestinal tract disorders, disorders of the genitor-urinary tract, ophthalmic diseases, obesity.

2. A compound of general formula **I** as specified in claim 1, provided that:

- when R^1 is phenyl, benzyl, 2-phenethyl or 3-phenpropyl optionally and independently substituted on the phenyl ring by one or two C_1-C_6 alkyl,

halogen, hydroxy, C_1-C_4 alkoxy or trifluoromethyl and X is oxygen, sulphur, methylene or -NH-, at least one of R^2 or R^3 is other than hydrogen;

- if m is 3, R^1-X 4-benzyloxy, R^2, R^4 and R^5 hydrogen then R^3 is other than 3-methoxy, and

- if m is 3, R^1-X 3-benzyloxy, R^2, R^4 and R^5 hydrogen then R^3 is other than 4-methoxy.

3. The use of a compound according to claim 1 having the general formula I as specified in claim 1, wherein m is 1 or 2, X is oxygen or methylene or NH or NCH_3, R^1 is C_1-C_8 alkyl chain, optionally substituted with CF_3, phenyl or phenoxy group, where the aromatic ring in R^1 is optionally substituted by one or two halogen or methoxy or trifluoromethyl groups, R^2 and R^3 are hydrogen, methyl, methoxy, fluorine, chlorine or bromine, R^4 and R^5 are hydrogen or methyl, halogen is chlorine or fluorine.

4. The use according to claim 1 wherein the compound is selected from the group consisting of:

3-(4-Butyloxy-benzylamino)-pyrrolidin-2-one;

3-[4-(4-trifluorobutyloxy)-benzylamino]-pyrrolidin-2-one;

3-(4-Pentyloxy-benzylamino)-pyrrolidin-2-one;

3-[4-(5-trifluoropentyloxy)-benzylamino]-pyrrolidin-2-one;

3-(4-Phenylethyl-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylbutoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy)-benzylamino-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-benzylamino)-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-benzylamino]-pyrrolidin-2-one;

3-(4-Pentyloxy-3-fluoro-benzylamino)-pyrrolidin-2-one;

3-(4-Pentyloxy-3-chloro-benzylamino)-pyrrolidin-2-one;

3-(4-Pentyloxy-3-bromo-benzylamino)-pyrrolidin-2-one;

3-(4-Pentyloxy-3-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Pentyloxy-3-methyl-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3-fluoro-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3-bromo-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3-methyl-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-2-chloro-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-3-bromo-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-3-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-3-methyl-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-2-chloro-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3-fluoro-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3-bromo-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3-methyl-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-2-chloro-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3-fluoro-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3-bromo-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3-methyl-benzylamino)-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3-bromo-benzylamino]-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3-methoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-(4-Pentyloxy-3-bromo-5-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Pentyloxy-3,5-dimethoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Pentyloxy-3,5-dimethyl-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3-bromo-5-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3,5-dimethoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Benzyloxy-3,5-dimethyl-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3-bromo-5-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3,5-dimethoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylallyloxy-3,5-dimethyl-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-3-bromo-5-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-3,5-dimethoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenylpentoxy-3,5-dimethyl-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3-bromo-5-methoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3,5-dimethoxy-benzylamino)-pyrrolidin-2-one;

3-(4-Phenoxyethoxy-3,5-dimethyl-benzylamino)-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-2-chloro-5-methoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3-fluoro-5-methoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3-bromo-5-methoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3,5-dimethoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(Naphthalen-1-ylmethoxy)-3,5-dimethyl-benzylamino]-pyrrolidin-2-one;

3-[4-(2-Fluorobenzyloxy)-benzylamino]-pyrrolidin-2-one;

3-[4-(2-Fluorobenzyloxy)-benzylamino]-N-methylpyrrolidin-2-one;
3-[4-(2-triFluoromethyl-benzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(2-Chlorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(2-Methoxybenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3-Fluorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3-Fluorobenzyloxy)-benzylamino]-N-methylpyrrolidin-2-one;
3-{N-[4-(3-Fluorobenzyloxy)-benzyl]-N-methyl}-amino-pyrrolidin-2-one;
3-[4-(3-triFluoromethyl-benzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3-Chlorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3-Methoxybenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3-Methoxybenzyloxy)-benzylamino]-N-methylpyrrolidin-2-one;
3-[4-(4-Fluorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(4-Chlorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(4-Methoxybenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(4-triFluoromethyl-benzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(2,3-diChlorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diChlorobenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diMethoxybenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-benzylamino]-N-methylpyrrolidin-2-one;
3-[4-(3,5-diMethoxyphenyl)-pentoxy]-benzylamino-pyrrolidin-2-one;
3-[4-(2-Fluorobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;
3-[4-(2-triFluoromethyl-benzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;
3-[4-(3-Fluorobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;
3-{[4-(3-Fluorobenzyloxy)-3-methyl-benzyl]-N-methylamino}-

pyrrolidin-2-one;

3-[4-(3-triFluoromethyl-benzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-[4-(3-Chlorobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-{[4-(3-Chlorobenzyloxy)-3-methyl-benzyl]-N-methylamino}-pyrrolidin-2-one;

3-[4-(3-Bromobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-{[4-(3-Bromobenzyloxy)-3-methyl-benzyl]-N-methylamino}-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-2-chloro-benzylamino]-pyrrolidin-2-one;

3-[4-(4-Fluorobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3-fluoro-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3-bromo-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3-methoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-[4-(4-Chlorobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3-bromo-5-methoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3,5-dimethoxy-benzylamino]-pyrrolidin-2-one;

3-[4-(4-triFluoromethyl-benzyloxy)-3,5-dimethyl-benzylamino]-pyrrolidin-2-one;

3-[4-(3,4-diChlorobenzyloxy)-2-chloro-benzylamino]-pyrrolidin-2-one;

3-[4-(3,4-diChlorobenzyloxy)-3-fluoro-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diChlorobenzyloxy)-3-bromo-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diChlorobenzyloxy)-3-methoxy-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diChlorobenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-2-chloro-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-3-fluoro-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-3-bromo-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-3-methoxy-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-3-methyl-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diChlorobenzyloxy)-3,5-dimethoxy-benzylamino]-pyrrolidin-2-one;
3-[4-(3,4-diChlorobenzyloxy)-3,5-dimethyl-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diChlorobenzyloxy)-3-bromo-5-methoxy-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-3-bromo-5-methoxy-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxybenzyloxy)-3,5-dimethoxy-benzylamino]-pyrrolidin-2-one;
3-[4-(3,5-diMethoxyphenyl)-allyloxy)-3,5-dimethoxy-benzylamino]-pyrrolidin-2-one.
3-(4-Benzyloxy-benzylamino)-piperidin-2-one;

3-(4-Benzyloxy-benzylamino)-azepan-2-one;

3-[4-(2-Fluorobenzyloxy)-benzylamino]-piperidin-2-one;

3-[4-(2-Fluorobenzyloxy)-benzylamino]-azepan-2-one;

3-[4-(2-Chlorobenzyloxy)-benzylamino]-piperidin-2-one;

3-[4-(2-Chlorobenzyloxy)-benzylamino]-azepan-2-one;

3-[4-(3-Fluorobenzyloxy)-benzylamino]-piperidin-2-one;

3-[4-(3-Fluorobenzyloxy)-benzylamino]-azepan-2-one;

3-[4-(4-Fluorobenzyloxy)-benzylamino]-piperidin-2-one;

3-[4-(4-Fluorobenzyloxy)-benzylamino]-azepan-2-one;

3-[4-(2-Chlorobenzylamino)-benzylamino]-piperidin-2-one;

3-[4-(2-Chlorobenzylamino)-benzylamino]-azepan-2-one;

3-{4-[(2-Chlorobenzyl)methylamino]-benzylamino}-piperidin-2-one;

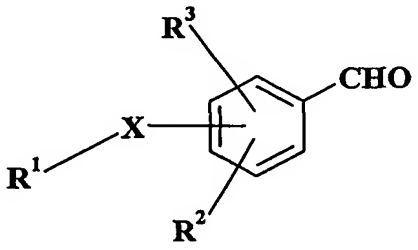
3-{4-[(2-Chlorobenzyl)methylamino]-benzylamino}-azepan-2-one;

3-(4-Phenoxybenzylamino)-pyrrolidin-2-one;

or pharmaceutically acceptable salts thereof.

5. A process for the preparation of a compound of formula **I**, as defined in claim 1, or a pharmaceutically acceptable salt thereof, the process comprising:

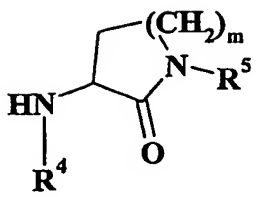
a) reaction of compounds of formula **II**



II

wherein R^1, R^2, R^3 and X are as defined above

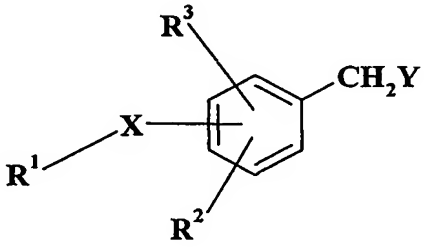
with compounds of formula **III**, in the presence of a reducing agent



III

wherein m and R^5 are as defined previously thus obtaining a compound of formula **I**; or

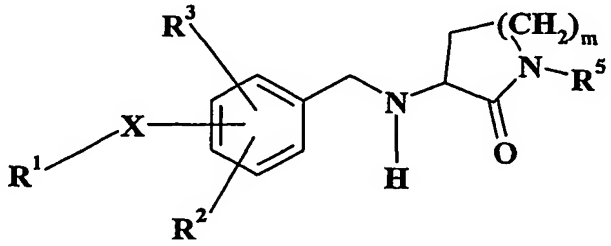
b) reaction of compounds of formula **IV**



IV

wherein R^1, R^2, R^3 and X are as defined above and Y is a halogen atom or a O-EWG group, where the EWG means an electron withdrawing group, like e.g. mesyl, tosyl or trifluoroacetyl groups, able to transform the oxygen which they are linked to, in a good leaving group with compounds of formula **III** thus obtaining a compound of formula **I**; or

c) reacting of a compound of formula **V**



V

wherein R^1, R^2, R^3, R^5, X and m are as defined above, with compounds of formula **VI** or **VII**

R^4-Y R^7-CHO

VI VII

wherein Y is as defined above; R^4 is as above defined and R^7 is hydrogen or C_1-C_5 alkyl; and, if desired, converting a compound of the invention into another compound of the invention and/or, if desired, converting a compound of the invention into a pharmaceutically acceptable salt and/or, if desired, converting a salt into a free compound and/or, if desired, separating a mixture of isomers of compounds of the invention into a single isomer.

6. A pharmaceutical composition containing a compound of formula I, as defined in claim 1, or a pharmaceutically acceptable salt thereof, in admixture with a suitable carrier and/or diluent and optionally to other therapeutic agents.